

Title (en)

MERCURY-FREE METAL HALIDE LAMP

Title (de)

QUECKSILBERFREIE METALLHALOGENIDLAMPE

Title (fr)

LAMPE A IODURES METALLIQUES EXEMPT DE MERCURE

Publication

EP 1037258 B1 20090415 (EN)

Application

EP 99905225 A 19990217

Priority

- JP 9900713 W 19990217
- JP 3841798 A 19980220
- JP 26115398 A 19980916
- JP 26464998 A 19980918

Abstract (en)

[origin: EP1037258A1] The present invention provides a mercury-free metal halide lamp with an increased lamp operating voltage and prolonged lamp life without enclosing mercury or excessively increasing an inner pressure of an arc tube. A lamp in accordance with the present invention contains, as a content of a fill material 202, 0.04 mg of ScI_3 , 0.21 mg of NaI , 7 atm of Xe at room temperature, and 0.1 mg of YI_3 , which is an iodide of Y, Y having an ionization potential as a simple substance being 5 to 10 eV and a vapor pressure at a temperature of lamp operation being 10<-5> or higher. <IMAGE>

IPC 8 full level

H01J 61/12 (2006.01); **H01J 61/20** (2006.01)

CPC (source: EP KR US)

H01J 61/12 (2013.01 - EP US); **H01J 61/86** (2013.01 - KR)

Citation (examination)

- US 3681218 A 19720801 - LUCAS GEORGES, et al
- EP 0762476 A1 19970312 - MATSUSHITA ELECTRIC IND CO LTD [JP]

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EP1288998A1; DE10354868B4; DE10245228B4; EP1158567A3; EP1437761A4; EP1037257A3; DE10307067B3; DE10307067B8; US6670765B2; US6608444B2; US7583028B2; WO2006043191A1; WO2004025691A1; WO2004055862A3

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DOCDB simple family (application)

EP 99905225 A 19990217; CN 200410031798 A 19990217; CN 99800163 A 19990217; DE 69940721 T 19990217; JP 9900713 W 19990217; KR 19997007601 A 19990820; MY PI9900582 A 19990219; US 38114099 A 19990916